SALIVARY FERNING AS AN INDICATOR OF OVULATION

ABSTRACT:

BACKGROUND OF STUDY:

There is an increasing demand for cheap and effective test to predict the ovulation in each menstrual cycle. The ferning in saliva is formed during ovulation due to increase in sodium chloride which is caused by elevated level of 17-β estradiol originating from granulosa cells of ovary during ovulation phase. It would be helpful for married women either as a guide for conception or for contraception and in unmarried women to detect period of premenstrual mood swings, polycystic ovarian disease and to treat future probabilities of infertility in advance. So predicting ovulation by an easier method like salivary ferning would be very useful for women.

AIM OF THE STUDY:

To study the effectiveness of salivary ferning in predicting ovulation in normal menstruating women.

MATERIALS AND METHODOLOGY:

A prospective study conducted in 100 healthy female volunteers aged between 18 and 40 years of age with regular menstrual cycles (26- 35 days) were recruited. Among them, 50 were married with mean married years of 7.5 years and average number of children 1.5. After obtaining questionnaire, ovulation tests were done from 11^{th} to 17^{th} day of menstrual cycle by Leutinizing hormone surge using urinary LH dip stick system, salivary ferning using hand held portable mini microscope and by transvaginal ultrasound.

Statistical analysis was done to compare ovulation tests by Pearson's correlation coefficient using STATA software version 10.

RESULTS:

Sensitivity of salivary ferning test was 98.9%.. There is positive correlation between salivary ferning and LH surge overall($r=0.89$, $p<0.05$), and between ultrasound ($r=0.94$, $p<0.05$) in married women and salivary ferning tests found to be statistically significant.

CONCLUSION:

Hence women can utilize saliva fern test to identify the optimal period of ovulation which is a simple, easy, effective, inexpensive and non-invasive method and can be used as an indicator of ovulation.

KEYWORDS: ovulation, salivary ferning, menstrual cycle.